Attorney's Docket No.: 10448-184008 / MPI1996-Applicant: Neil H. Bander 037P2RCP1DV1ACN1A; CRF D-1912L

Serial No.: 09/929,546

Filed : August 13, 2001

: 3 of 24 Page

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-57. (Cancelled)

58. (Currently Amended) A method for treating, preventing, or delaying development or progression of non-prostate cancer in a subject comprising:

providing an antibody or antigen binding portion thereof which binds to the extracellular domain of prostate specific membrane antigen; and

administering the antibody or antigen binding portion thereof to a subject in need of treatment under conditions effective to treat, prevent, or delay the development or progression of non-prostate cancer.

- 59. (Previously presented) A method according to claim 58, wherein the antibody or antigen binding portion thereof binds to vascular endothelial cells proximate to or within the non-prostate cancerous cells.
- 60. (Previously presented) A method according to claim 58, wherein the non-prostate cancer is selected from the group consisting of renal cancer, urothelial cancer, colon cancer, rectal cancer, lung cancer, breast cancer, metastatic adenocarcinoma of the liver.
- 61. (Previously presented) A method according to claim 58, wherein the administering is carried out parenterally.

Applicant: Neil H. Bander Attorney's Docket No.: 10448-184008 / MPI1996-037P2RCP1DV1ACN1A; CRF D-1912L

Serial No.: 09/929,546

Filed : August 13, 2001

Page : 4 of 24

62. (Previously presented) A method according to claim 61, wherein the administering is carried out intravenously.

- 63. (Previously presented) A method according to claim 58, wherein the administering is carried out by intracavitary instillation.
- 64. (Previously presented) A method according to claim 58, wherein the administering is carried out rectally.
- 65. (Previously presented) A method according to claim 58, wherein the administering is carried out intramuscularly.
- 66. (Currently amended) A method according to claim 58, wherein the antibody or antigen binding portion binds live cells and/or wherein the antibody is an IgG.
- 67. (Previously presented) A method according to claim 58, wherein the antibody is selected from the group consisting of a monoclonal antibody and a polyclonal antibody.
- 68. (Previously presented) A method according to claim 67, wherein the antibody is selected from the group consisting of an E99, a J415, a J533, and a J591 monoclonal antibody.
- 69. (Previously presented) A method according to claim 67, wherein the antibody is a monoclonal antibody produced by a hybridoma having an ATCC Accession Number selected from the group consisting of HB-12101, HB-12109, HB-12127, and HB-12126.
- 70. (Previously presented) A method according to claim 58, wherein the antibody or antigen binding portion thereof binds to an epitope of prostate specific membrane antigen which

Attorney's Docket No.: 10448-184008 / MPI1996-

037P2RCP1DV1ACN1A; CRF D-1912L

Serial No.: 09/929,546 : August 13, 2001

Filed Page

: 5 of 24

Applicant: Neil H. Bander

is also recognized by a monoclonal antibody selected from the group consisting of an E99, a J415, a J533, and a J591 monoclonal antibody.

- 71. (Previously presented) A method according to claim 70, wherein the antibody or antigen binding portion thereof binds to an epitope of prostate specific membrane antigen which is also recognized by monoclonal antibody J591.
- 72. (Amended) A method according to claim 58, wherein the antibody or antigen binding portion thereof comprises an antigen binding portion of an amino acid sequence selected from the group consisting of SEQ ID NO:8 (variable heavy chain), SEQ ID NO:19 (variable light chain), an amino acid sequence of the variable heavy chain produced by the hybridoma having ATCC deposit no. HB-12126, and an amino acid sequence of the variable light chain produced by the hybridoma having ATCC deposit no. HB-12126 competes for binding to prostate specific membrane antigen (PSMA) with a monoclonal antibody selected from the group consisting of an E99, a J415, a J533 and a J591 monoclonal antibody.
- 73. (Amended) A method according to claim 72, wherein the antibody or antigen binding portion thereof comprises an antigen binding portion of an amino acid sequence of SEQ ID NO:8 (variable heavy chain) or an amino acid sequence of the variable heavy chain produced by the hybridoma having ATCC deposit no. HB-12126 and an antigen binding portion of an amino acid sequence of SEQ ID NO:19 (variable light chain) or an amino acid sequence of the variable light chain produced by the hybridoma having ATCC deposit no. HB-12126 competes for binding to prostate specific membrane antigen (PSMA) with a J591 monoclonal antibody.
 - 74. (Cancel)
 - 75. (Cancel)
 - 76. (Cancel)
 - 77. (Cancel)

Applicant: Neil H. Bander Attorney's Docket No.: 10448-184008 / MPI1996-

Serial No.: 09/929,546 037P2RCP1DV1ACN1A; CRF D-1912L

Filed : August 13, 2001

Page : 6 of 24

78. (Cancel)

79. (Cancel)

80. (Cancel)

81. (Cancel)

82. (Cancel)

83. (Cancel)

- 84. (Currently amended) A method according to claim 58, 70, or 72, or 72, or 78, wherein the antibody is a monoclonal antibody.
- 85. (Currently amended) A method according to claim 58, 70, or 72, or 78, wherein the antibody or antigen binding portion thereof is internalized with the prostate specific membrane antigen.
- 86. (Currently amended) A method according to claim 58, 70, or 72, or 78, wherein the antibody or antigen binding portion thereof is selected from the group consisting of a Fab fragment, a F(ab')2 fragment, and a Fv fragment.
- 87. (Currently amended) A method according to claim 58, 70, or 72, or 78, wherein the antibody or antigen binding portion thereof further comprises a cytotoxic drug.
- 88. (Previously presented) A method according to claim 87, wherein the cytotoxic drug is selected from the group consisting of a therapeutic drug, a compound emitting radiation, molecules of plant, fungal, or bacterial origin, biological proteins, and mixtures thereof.
- 89. (Previously presented) A method according to claim 87, wherein the cytotoxic drug is a compound emitting radiation.

Applicant: Neil H. Bander Attorney's Docket No.: 10448-184008 / MPI1996-

Serial No.: 09/929,546 037P2RCP1DV1ACN1A; CRF D-1912L

Filed

: August 13, 2001

Page : 7 of 24

90. (Previously presented) A method according to claim 89, wherein the compound emitting radiation is an alpha-emitter.

- 91. (Previously presented) A method according to claim 90, wherein the alpha-emitter is selected from the group consisting of ²¹²Bi, ²¹³Bi, and ²¹¹At.
- 92. (Previously presented) A method according to claim 89, wherein the compound emitting radiation is a beta-emitter.
- 93. (Previously presented) A method according to claim 92, wherein the beta-emitter is ¹⁸⁶Re.
- 94. (Previously presented) A method according to claim 92, wherein the beta-emitter is ⁹⁰Y.
- 95. (Previously presented) A method according to claim 89, wherein the compound emitting radiation is a gamma-emitter.
- 96. (Previously presented) A method according to claim 95, wherein the gamma-emitter is ¹³¹I.
- 97. (Previously presented) A method according to claim 89, wherein the compound emitting radiation is a beta- and gamma-emitter.
- 98. (Previously presented) A method according to claim 88, wherein the cytotoxic drug is a molecule of bacterial origin.

Attorney's Docket No.: 10448-184008 / MPI1996-

037P2RCP1DV1ACN1A; CRF D-1912L

Serial No.: 09/929,546 Filed: August 13, 2001

Applicant: Neil H. Bander

Page : 8 of 24

99. (Previously presented) A method according to claim 88, wherein the cytotoxic drug is a molecule of plant origin.

- 100. (Previously presented) A method according to claim 88, wherein the cytotoxic drug is a biological protein.
- 101. (Currently amended) A method according to claim 58, 70, or 72, or 78, wherein the antibody or antigen binding portion thereof further comprises a label.
- 102. (Previously presented) A method according to claim 101, wherein the label is selected from the group consisting of a biologically-active enzyme label and a radiolabel.
- 103. (Previously presented) A method according to claim 101, wherein the label is a radiolabel selected from the group consisting of ¹¹¹In, ⁹⁹mTc, ³²P, ¹²⁵I, and ¹⁸⁸Rh.
- 104. (Currently amended) A method according to claim 58, 70, or 72, or 78, wherein the antibody or antigen binding portion thereof is effective to initiate an endogenous host immune function.
- 105. (Previously presented) A method according to claim 104, wherein the endogenous host immune function is complement-mediated cellular cytoxicity.
- 106. (Previously presented) A method according to claim 104, wherein the endogenous host immune function is antibody-dependent cellular cytoxicity.
- 107. (Currently amended) A method according to claim 58, 70, or 72, or 78, wherein the antibody or antigen binding portion thereof is in a composition further comprising a pharmaceutically acceptable carrier, excipient, or stabilizer.

Applicant: Neil H. Bander Attorney's Docket No.: 10448-184008 / MPI1996-

Serial No.: 09/929,546 037P2RCP1DV1ACN1A; CRF D-1912L

Filed : August 13, 2001

Page : 9 of 24

108. (Currently amended) The method according to claim 58, 70, or 72, or 78, wherein the antibody is administered in conjunction with a second therapeutic modality.

- 109. (Previously presented) The method according to claim 108, wherein the second therapeutic modality is selected from the group consisting of surgery, radiation, chemotherapy, immunotherapy and hormone replacement.
- 110. (Previously presented) The method according to claim 109, wherein the hormone replacement comprises treatment with estrogen or an anti-androgen agent.
- 111. (Previously presented) The method according to claim 110, wherein the antiandrogen agent is an agent which blocks or inhibits the effects of testosterone.

Please add the following new claims:

- 112. (New) The method according to claim 70, wherein the antibody or antigen binding portion thereof binds to an epitope of prostate specific membrane antigen which is also recognized by monoclonal antibody J415.
- 113. (New) The method according to claim 72, wherein the antibody or antigen binding portion thereof competes for binding to prostate specific membrane antigen (PSMA) with a J415 monoclonal antibody.